# Oil and Gas Leasing Program

# Final Environmental Impact Statement May 1985

STATE OF WASHINGTON
DEPARTMENT OF
NATURAL RESOURCES
BRIAN BOYLE
COMMISSIONER OF PUBLIC LANDS
ART STEARNS — SUPERVISOR

This document is ((drafted)) prepared in compliance with the State Environmental Policy Act (Chapter 43.21C RCW); Revised SEPA Guidelines, effective April 4, 1984 (Chapter 197-11 WAC); Regulations of the Department of Natural Resources, effective October 4, 1984 (Chapter 332-41 WAC).

#### COVER MEMORANDUM

The Washington State Board of Natural Resources is considering adopting Goals and Policies and the Commissioner of the Department of Natural Resources is considering adopting the program to carry out these goals and policies for leasing of department-managed lands for oil and gas preliminary investigation and exploratory drilling.

The department is issuing the proposed Oil and Gas Leasing Program (OGLP) simultaneously with this Environmental Impact Statement on the OGLP. The two documents are meant to be read together to provide a complete understanding of the OGLP, alternatives and their impacts.

The Final Programmatic Environmental Impact Statement (((P))FEIS) discusses possible environmental impacts (with mitigative measures and alternatives) that could occur on department-managed lands as a result of activities ((proposed)) permitted in the Oil and Gas Leasing Program. Activities ((proposed)) will be influenced by the diversity of climate, topography, vegetation, soils and population density found on department-managed lands across the state.

This ((P))FEIS is prepared in accordance with the Washington State Environmental Policy Act of 1971 as amended by Chapter 43.21C RCW and rules promulgated by Chapter 197-11 WAC, effective April 4, 1984.

The department proposes to allow preliminary investigative and exploratory actions for oil and gas purposes on department-managed land. If exploratory drilling under a lease leads to a producing well, the department also proposes to allow development and production. The development and production phases shall require an environmental checklist and may require a site-specific supplemental environmental impact statement.

The department could choose to deny any or all exploration activities or refuse to lease department-managed lands for oil and gas purposes, but by so doing would be in conflict with department goals and basic trust responsibilities.

The ((P))FEIS is intended to serve as a baseline for evaluation of proposed oil and gas preliminary investigations and exploratory drilling activities only. The department is ((preposing)) adopting a phased review process which examines site-specific impacts associated with development and production when they occur. Since the location of potential wells is not known and some time may elapse between leasing and the development/production phases, these phases are not analyzed.

The ((P))FEIS does not cover activities on private or federal lands or stateowned lands managed by other agencies. It also does not address alternatives to or impacts of actions required by the Oil and Gas Conservation Act. Those regulations are administered as a separate entity by the department's Division of Geology and Earth Resources on behalf of the Oil and Gas Conservation Committee. All oil and gas related management activities on department-managed lands are subject to those regulations.

#### KEY ENVIRONMENTAL ISSUES

Key environmental issues associated with the proposed action were identified by department analysis and the scoping process. Those issues are listed according to frequency of response to the scoping notice. The page numbers on which a discussion may be found ((is-also)) are listed below.

3

- Disruption of fish and wildlife habitat.
   Pages 44, 51, 52, 54, 55, 59, 63, 67, 72, 76
- Impacts to threatened or endangered plant and animal species.
   Pages 39, 40, 55, 59, 63, 76, 81
- Altered movement or degraded quality of surface water. Pages 43, 71, 76, 80
- Altered movement or degraded quality of ground water. Pages 63, 71, 81
- Noise.
   Pages 44, 64, 67, 72, 76, 82, 84
- Generation and disposal of solid and liquid wastes. Pages 45, 47, 65, 71, 79, 80, 81, 85
- Release of poisonous or hazardous substances.
   Pages 72, 74, 82
- Impacts to unstable soils and steep slopes. Pages 43, 58
- Increase in erosion due to construction and clearing. Pages 43, 75
- Decrease in air quality due to increased particulates or fumes.
   Pages 43, 63, 64, 75, 79
- Degradation of public drinking water sources. Pages 35, 63, 71, 72
- Increased road maintenance as a result of increased vehicular use.
   Pages 45, 60

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ROAD CONSTRUCTION IMPACTS=

SOILS VEGETATION TOPOGRAPHY AIR QUALITY EROSION

RENEWABLE RESOURCES SURFACE WATER QUALITY WILDLIFE HABITAT

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#### FACT SHEET

Action Sponsor:

The Washington State Department of Natural Resources

Proposed Action:

Leasing of department-managed lands for oil and gas preliminary investigation and exploratory drilling.

Project Location:

Statewide

Responsible Official

and Contact Person:

Kenneth E. Solt, Division Manager

Lands Division Mail Stop QW-21

Department of Natural Resources

Olympia, WA 98504 (206) 753-2989

Prepared By:

Donald M. Ford and Ellis R. Vonheeder

Contributing Editor:

Ellen Ellis

Note: An oil and gas lease is obtained by public auction for department-managed lands. Listed permits and approvals may be required to conduct preliminary investigation and exploratory drilling.

Activities may require the following permits and approvals.

011 and Gas Lease

Department of Natural Resources

Seismic Exploration

Oil and Gas Conservation Committee

Permit:

Oil and Gas Drilling

011 and Gas Conservation Committee

Permit:

Right of Entry Permit:

Department of Natural Resources

Zone Changes and Local

Appropriate County/City Planning or Building

Permits:

Offices

Permits for Access On/Off County Roads: Appropriate County Offices Shoreline Management Appropriate County Planning Office Permits: Water Removal Permits: Department of Ecology Hydraulic Project Departments of Fisheries and Game Approval: Solid Waste Disposal: Appropriate County Health District Office Sanitary Waste Disposal: Appropriate County Health District Office Compliance with the Department of Natural Resources Division of Forest Practices Act: Private Forestry and Recreation Compliance with State Department of Ecology Regional Office Dangerous Waste Regulations: Compliance with State Department of Ecology Regional Office Noise Standards: Consultation Regarding Office of Archaeology and Historic Preservation Archaeological/ and Washington Archaeological Research Center Historical Resources: Consultation Regarding Department of Natural Resources Natural Heritage **Endangered Species:** Program and Department of Game Nongame Program Consultation Regarding Department of Game Wildlife Resources: Location of EIS Background: Washington Department of Natural Resources Lands Division Room 202 Public Lands Building 14th and Water Street Olympia, Washington 98504 ((6))copy of this ((P))FEIS:

Cost to ((P))purchase

((\$5.00-per-set)) Initial copies are available from the Department at no cost. Additional copies are available for \$6.00 per set.

Date of Issue of ((P))FEIS:

((Nevember-26,-1984)) May 22, 1985

((6lesing-Date-fer-Public Gemments:))

((January-15,-1985))

WAC	197-11-960	Adoption	notice.
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Description of current proposal Programmatic E	
Proponent Department of Natural R	lesources (DNR)
Location of current proposal <u>Department mana</u>	ged lands, statewide
Title of document being adopted State of Was	hington Natural Heritage Program
Agency that prepared document being adopted DN	R
Date adopted document was prepared1983	
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If the document being adopted has been challenged (19	7-11-630), please describe:
The document is available to be read at (place/time) _ Room 201, Public Lands Building, 8 A.M 5 P.M., Monday-Friday	Department of Natural Resources, 14th & Water Street, Olympia,WA
We have identified and adopted this document as being	g appropriate for this proposal after independent review. The the current proposal and will accompany the proposal to the
Name of agency adopting document <u>Department</u>	of Natural Resources
Contact person, if other than responsible official	Phone
Responsible official Kenneth E. Solt	
Position/title Manager, Lands Division	Phone 753-2989
Address Room 202, Public Lands	Building, Olympia,WA 98504
Date/0/23/81/ Signature Kenneth	9. Sact

|Ch. 197-11 | 52|

ADOPTION OF EXISTING ENVIRONMENTA	
Adoption for (check appropriate box) 🗆 DNS 😾 EIS 🗀 other	
Description of current proposal Programmatic EIS. Oil an	d Gas Lease Program
Proponent Department of Natural Resources (	DNR)
Location of current proposal <u>Department -managed lands</u>	. statewide
Title of document being adopted Forest Land Management	Program EIS
Agency that prepared document being adopted	
Date adopted document was prepared November 1983	
Description of document (or portion) being adopted Heritage Pro	tection-Endangered,
Threatened and Sensitive Species, Natural	Area Preserves/Registry
Program, and Cultural Resources, and the E	xisting Environmental
Conditions.  If the document being adopted has been challenged (197-11-630), please	se describe:
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Responsible official Kenneth E. Solt	

Address <u>Room 202. Public Lands Building. 14th and Water Street. Olympia</u> 9850

Date 10/22/84 Signature Jum Ja G. Self

WAC [Ch. 197-11 RCW-p 52]

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#### DISTRIBUTION LIST

Clark

Lewis

## FEDERAL AGENCIES

Benton U.S. Forest Service

Colville National Forest Chelan Gifford Pinchot National Forest

Mt. Baker-Snoqualmie National Forest Okanogan National Forest Clallam

Olympic National Forest Wenatchee National Forest

Columbia U.S. Bureau of Indian Affairs

Cowlitz-Wahkiakum U.S. Bureau of Land Management

U.S. Fish and Wildlife Service Ferry

Franklin U.S. National Park Service Olympic National Park

Grant Rainier National Park

North Cascades National Park Grays Harbor

WASHINGTON STATE GOVERNMENTAL AGENCIES Island

Department of Ecology

Jefferson Department of Fisheries

King

Department of Game Kitsap

Department of Social and Health Services Kittitas

Department of Transportation **Klickitat** 

Office of Archaeology and Historic

Preservation Parks and Recreation Commission Lincoln

Washington State Conservation Commission Okanogan

Washington State Energy Office Pacific

Pend Orielle COUNTY PLANNING COMMISSIONS

Pierce Adams

Asotin San Juan

## INDIAN TRIBES AND ASSOCIATIONS

Skagit

Skamania

Snohomish

Spokane

Stevens

Thurston

Whatcom

Yak ima

CITIES AND TOWNS

Buckley

Carnation

Centralia

Eatonville

Everett

North Bend

Richland

Seattle

Snohomish

Sultan

Tacoma

PUBLIC UTILITY DISTRICTS

Chelan County

Snohomish County

Chehalis Business Council

Colville Business Council

Hoh Tribal Business Committee

Jamestown Clallam Indian Tribe

Kalispel Business Committee

Lower Elwha Tribal Council

Lummi Business Council

Makah Tribal Council

Muckleshoot Tribal Council

Nisqually Indian Community

Nooksack Indian Tribal Council

Northwest Indian Fisheries Commission

Port Gamble Business Committee

Puyallup Tribal Council

Ouileute Tribal Council

Quinault Business Committee

Sauk-Suiattle Indian Tribal Council

Shoalwater Bay Tribal Council

Skokomish Tribal Council

Spokane Business Council

Squaxin Island Tribal Council

Stillaguamish Board of Directors

Suquamish Tribal Council

Tulalip Board of Directors

Upper Skagit Tribal Council
Yakima Tribal Council

STATE UNIVERSITY GEOLOGY DEPARTMENTS

Central Washington University
Eastern Washington University
University of Washington
Washington State University
Western Washington University

SCHOOL DISTRICT

Sultan School District 311

HEALTH DISTRICT

Snohomish Health District

DEPOSITORY LIBRARIES OF WASHINGTON

Aberdeen Public Library
Anacortes Public Library
Asotin County Library
Auburn Public Library

Bellingham Public Library

Burlington Public Library

Camas Public Library

Central Washington University

Clark College

Eastern Washington University Library

Everett Public Library

Fort Vancouver Regional Library

Gonzaga University

King County Library System

King County Municipal Reference Library

Kitsap Regional Library

Longview Public Library

Mid-Columbia Regional Library

Moses Lake Public Library

Mount Vernon Public Library

North Olympic Library System

Pacific Lutheran University

Pasco Public Library

Pierce County Library

Port Townsend Public Library

Prosser Public Library

Puyallup Public Libary

Renton Public Library

Richland Public Library

Seattle Pacific University

Seattle Public Library

Shelton Public Library

Spokane County Library

Spokane Public Library

Tacoma Public Library

Timberland Regional Library

U.S. Department of Energy - Law Library,

Richland

University of Puget Sound

University of Washington

Walla Walla Public Library

Washington State University

Wenatchee Public Library

Western Washington University

Whitman College

Yakima Valley Regional Library

ORGANIZATIONS

Association of Washington Businesses

Association of Washington Cities

Black Hills Audubon Society

Evergreen Audubon Society

Friends of the Columbia

Hood Canal Environmental Council

League of Women Voters

Nature Conservancy

Northwest Association of Petroleum

Landmen

Northwest Steelhead Salmon Council

Olympic Peninsula Audubon Society

Pilchuck Audubon Society

Seattle Audubon Society

Sierra Club

Washington Association of Counties

Washington Cattlemen's Association

Washington Environmental Council

Washington Forest Protection Association

Washington Independent Petroleum Royalty

**Owners** 

Washington Sportsmen's Council

Washington Wheatgrowers Association

Willapa Hills Audubon Society

OIL AND GAS TRADE ASSOCIATIONS

Western Oil and Gas Association

COMPANIES

American Hunter Exploration

Anschutz Corp.

Arco Corporation

Boise Cascade Corp.

Champlin Petroleum

Chevron USA

Conoco Inc.

Crown-Zellerbach

Diamond Shamrock Corp.

Exxon Corp.

Garth Tallman and Assoc.

Georgia Pacific

Getty Oil Co.

Gulf Oil Corp.

Howell Energy

ITT Rayonier

Knight Royalty Corp.

Lewis County Timber Co.

Longview Fibre Corp.

Marathon Oil Co.

May Petroleum Inc.

Meridian Land and Mineral Co.

Mobil Oil Corp.

Port Gamble Co.

Rex Randolph

St. Regis Co.

Scott Paper Co.

Shell Oil Co.

Simpson Timber

Sohio Petroleum

Union Oil Co.

Voyager Petroleum

Weyerhaeuser Co.

OIL AND GAS LESSEES

Amoco Production

Artamus

Chaparral

William Corry

Emefco Petroleum

Jerry Ryan and Co.

Junico Corp.

Love Oil Co.

Martin Wilson and Assoc.

Milestone Petroleum

Steve Saban

Say Energy Inc.

Texaco Corp.

Nathan Thomas

Kirk Tracy

Trinity Resources

INDIVIDUALS

David Clark

Don Lee Fraser

Marshall T. Hunting

Dan Mathias

Darrell Williams

John DeYonge

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#### **BACKGROUND**

State trust lands have been leased for oil and gas exploration since the early 1900s. Over the years, interest has fluctuated. In early years, neither the private nor governmental sector had any concerns other than leasing a tract of land and receiving the appropriate rentals. As time passed, concern was expressed about the impact of underground drilling and the depletion of oil and gas reserves by too much drilling. Legislation was passed in 1951 establishing the Oil and Gas Conservation Committee (Chapter 78.52 RCW) to issue permits and regulate drilling for oil and gas.

In 1971 the State Environmental Protection Act (SEPA) (Chapter 43.21C RCW) was enacted to bring into focus the environmental impacts that activities could have on the environment of the state of Washington.

Leasing of state trust lands for oil and gas exploration was subject to SEPA compliance. Individual lease applications were not investigated as to their potential impact on the environment but an overall checklist was prepared for the act of leasing. Environmental issues were investigated when permits were acquired from the Oil and Gas Conservation Committee for exploration drilling or shot-hole seismic surveys. The lease required the lessee to comply with the permit. During leasing activities in 1979, concerns were raised about the relationship of oil and gas leasing and exploration to the environment.

In 1981 and 1982 several hundred applications to lease for oil and gas exploration were received by the department. In response to concerns raised at meetings with state agencies and four public meetings, an environmental checklist was required for each lease application. The department then divided lease applications into three categories, depending upon their relationship to environmental issues. The categories were: (1) normal leasing, (2) restricted leasing and (3) withdrawn from leasing because of either law or policy decision by the Commissioner in areas that are being extensively studied for management issues. A public auction was held April, 1984, using the category system.

Prior to the auction, the complex process of determining category placement, and the concerns expressed in public meetings caused the department to begin preparation of a program and a programmatic environmental impact statement for oil and gas seismic exploration and exploratory drilling. All April 1984, leases contained a provision that those activities would not be allowed until completion of the program and environmental impact statement.

During the development of the program and the environmental analysis, the scope was expanded to include all preliminary investigative activities. The department's goal is to make department—managed lands available for leasing, and through this ((P))FEIS identify and describe the environmental issues and propose mitigation measures necessary to alleviate harmful environmental impacts.

#### SCOPING

SEPA guidelines (WAC 197-11-408) direct a lead agency to narrow the scope of an EIS to probable significant adverse impacts and reasonable alternatives, including mitigation measures.

Through circulation of a Scoping Notice dated June 6, 1984, the department proposed a programmatic EIS (PEIS) to cover oil and gas leasing, explosive seismic exploration and exploratory drilling on department-managed lands. Included with this notice was a Determination of Significance with a listing of areas of concern previously identified.

A copy of the Scoping Notice and an environmental checklist were available during the 21-day comment period which began June 8, 1984. The department received 26 responses from agencies, tribes and the private sector. A summary of the major areas of concern indicated in the comments and addressed in the PEIS follows.

#### NATURAL ENVIRONMENT

### <u>Earth</u>

- Steep slopes
- Unsuitable soils
- Compaction of soils
- · Erosion increase due to road construction

#### Air

· Decrease in air quality from increased particulates or fumes.

#### Water

- · Altered movement and degraded quality of surface waters
- Increased runoff of surface waters
- Altered movement and degraded quality of ground water
- Degradation of public drinking water supplies

# Plants and Animals

- Degradation of fish and wildlife habitat
- . Impacts to breeding, nesting, calving, wintering or spawning areas

- Impacts to threatened or endangered species of plants and animals

## Energy and Natural Resources

- · Storage of chemicals and fuels
- · Amounts of fuel required to sustain exploration operation
- · Impacts and damage to forested areas

#### **BUILT ENVIRONMENT**

## Environmental Health

- Noise
- Possible spills and explosions
- Possible release of poisonous or hazardous substances

## Land and Shoreline Use

- · Impacts to wetland, riparian areas and floodplains
- Increased population
- Increased housing requirements
- · Light and glare from artificial light sources
- · Aesthetics
- Preservation of historically or culturally significant areas
- · Removal of agricultural cropland from production

# **Transportation**

- Increased road maintenance
- Increased vehicular traffic

# <u>Public Services and Utilities</u>

- Increased police protection
- · Impacts to parks and recreation areas
- Disposal of solid and liquid wastes